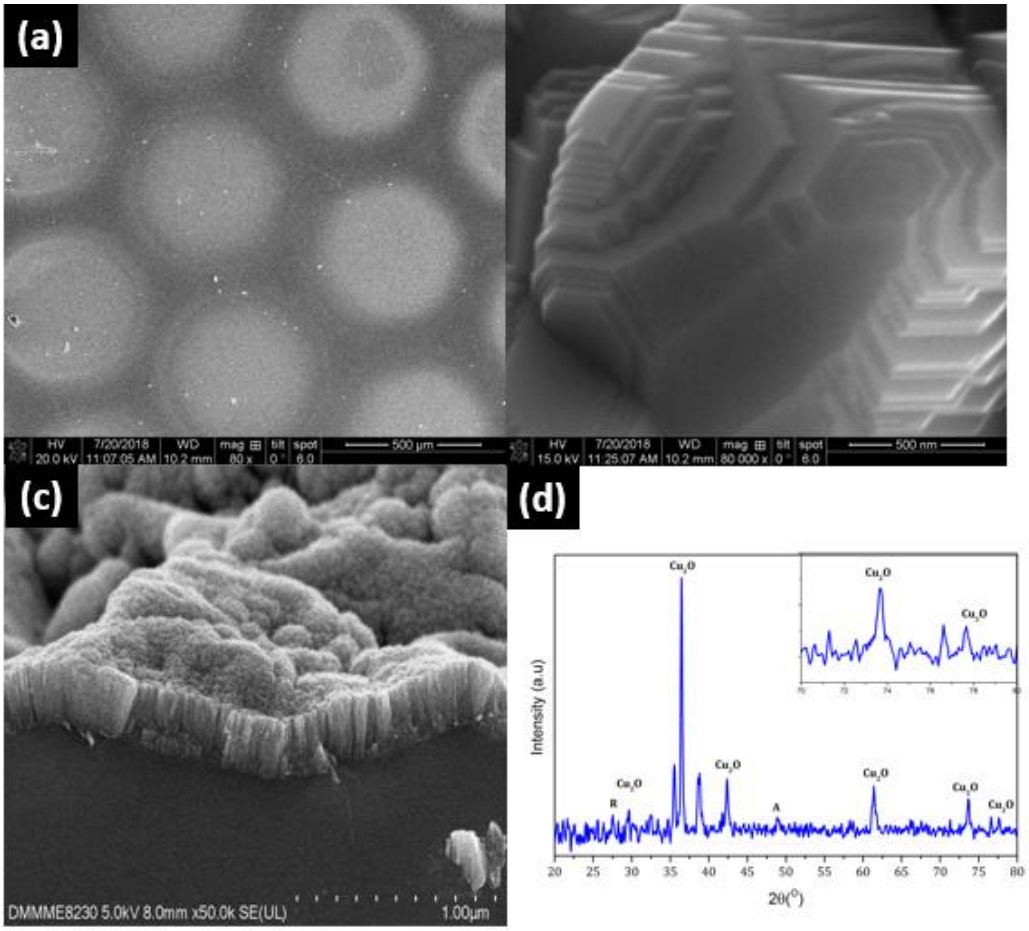
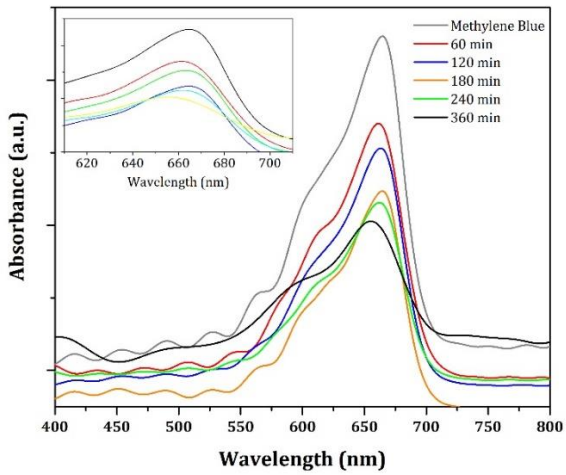


Characterization of the TiO_2/Cu_2O heterojunction thin films (a) SEM micrograph of the TiO_2/Cu_2O heterojunction thin films at 80x wherein patterned Cu_2O clusters were represented by the bright circles. (b) SEM micrograph of the TiO_2 thin film layer synthesized by reactive RF magnetron sputtering followed by thermal oxidation in air atmosphere at 500°C, (c) SEM images of the terraced grain like structured Cu_2O clusters deposited on top of the TiO_2 thin film layer and (d) XRD pattern of the TiO_2/Cu_2O heterojunction thin films showing peaks corresponding to Cu_2O as well as rutile and anatase TiO_2.



Methylene blue degradation using TiO_2/Cu_2O heterojunction under visible light irradiation. Changes in the absorption spectra at the visible region of methylene blue dye under visible light irradiation as a function of varying irradiation time. Plot shows a decrease in the absorption at around 665nm as irradiation time increases indicating the degradation of the methylene blue.